ORDER FORM: SOLAR AND SUNSHINE DATA (ORDERED OFFLINE)

JANUARY 2004

National Climatic Data Center

151 Patton Avenue, Room 120

Asheville, NC 28801-5001

PHONE 828-271-4800

FAX: 828-271-4876

ALL ORDERS MUST BE PAID IN ADVANCE.

SERVICE AND HANDLING CHARGE: \$5.00, OR \$11 IF ORDERED ITEMS TOTAL \$50 OR MORE

MASTERCARD/VISA/AMEX/DISCOVER ACCEPTED

MAKE PAYMENT TO: "NNDC/NCDC" IN U.S. FUNDS.

MUST BE DRAWN ON A U.S. BANK OR U.S. AFFILIATE OF FOREIGN BANK.

PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

CALL TO CONFIRM CURRENT PRICES.

RUSH PROCESSING: ADD \$60.00

TELEX: 6502643731 TDD: 828-271-4010*
INTERNET: ncdc.orders@noaa.gov

WEB SITE: http://www.ncdc.noaa.gov

FOREIGN SURCHARGE: \$10.00 ORDERS < \$100; \$20.00 ORDERS \$100 OR MORE

FEDERAL AGENCIES ARE REQUIRED TO SUBMIT U.S. GOVERNMENT PURCHASE ORDERS.

This form or photocopies may be used to order the items listed. To order, enter price in blank provided, listing cities or months where appropriate. Call to confirm availability of city desired.

SUNRISE/SUNSET TIMES

The National Climatic Data Center does not provide official sunrise/sunset times. Solar and lunar tables and official sunrise/sunset times may be requested by writing to the address below:

U.S. Naval Observatory

3450 Massachusetts Ave NW (WEB SITE: http://tycho.usno.navy.mil/srss.html)

Washington, DC 20007

SOLAR RADIATION AVERAGES

1. Mean Daily Solar Radiation, monthly and annual maps (p. 69 from CLIMAT**, 1931-60),

1 ea. (Prices are subject to paper copy price list.)

\$5.00

2. Annual Average Daily Global Solar Radiation on a South Facing Surface (1952-75) 1 map.

Order Environmental Information Summary C-21, "Annual Average Climatic Maps of the U.S.":

(Free)

3. <u>Input Data for Solar Systems</u> (1941-70), Paper copy of 1 page for any of 248 large U.S. cities. 1-10 Cities (APPROXIMATE PRICE):

Entire publication:

\$10.00 \$12.00

Contains: Normal max, min and mean temperatures
Normal heating and cooling degree days

Monthly Mean daily total solar radiation

- 4. <u>Insolation Data Manual</u> (1952-75) Contains above statistics from item 3 and a global cloudiness index.
- 5. <u>Direct Normal Solar Radiation Data Manual</u> (1952-75) long term, monthly mean, daily totals for 235 National Weather Service Stations.

Numbers 4 and 5 above have been combined in one volume without modifications and are available from the National Technical Information Service, 5285 Port Royal Road, Springfield, Virginia, 22161. Telephone number 1-800-553-6847. Order number DE90000353.

6. Solar Radiation Energy Resource Atlas of the U.S. (1952-75)

Contains: Maps of monthly and annual values of daily:

Global average solar radiation

Global average direct normal solar radiation

Global average diffuse solar radiation

Available from NTIS. Note address and phone listed above (item 5). Order number DE84005105.

7. The Solar Radiation Energy Resource Atlas above are available from NCDC and include monthly and annual data in photocopy forms for 237 stations. Write for a free description and station list of these tables. Call or write for cost estimates of photocopies.

1. Solar and Meteorological Surface Observational Network (SAMSON) - 3 CD-ROM set including hourly observational and modelled solar radiation data and selected meteorological elements from 1961-90 for 237 U.S. stations. Also available for individual U.S. regions (Eastern, Central, or Western) at \$175.00 each. Cost for entire set: \$525.00. For more information see our CD-ROM Products price list.

SOLAR RADIATION MEASUREMENTS

1. Solar Radiation and Radiation Balance Data (The World Network)

Contains year-to-year monthly and annual means of global solar radiation, radiation balance and sunshine duration for the periods 1964-1968, 1969-1973, 1974-1979 and 1980-1984. Available for many worldwide locations. Call to confirm availability of specific cities.

1-10 cities (per period) (APPROXIMATE PRICE):	\$ 5.00
entire publication 1964-1968:	\$125.00
entire publication 1969-1973:	\$ 40.00
entire publication 1974-1979:	\$ 45.00
entire publication 1980-1984:	\$ 40.00

2. Solar Radiation Data, Monthly Summary (1977-1980). Monthly publication is out of print, but is available as photocopies List Months:

^{*}TDD = Telecommunications Device for the Deaf.

^{**}CLIMAT = Climatic Atlas of the US (1931-60).

3. Hourly Solar Radiation (unedited) (January 1981 - October 1985) (suspended with the publication in December 1980). List months:	This is a continuation of the above data but editing for quality control was
4. Hourly Solar Radiation Data (edited) (January 1988 - Current). Global Radiation Network. List months:	lobal and direct solar radiation data are collected for the 31 station NOAA
Data from individal stations can be provided on paper copies. (2 page specific stations and for cost estimate.	s per month per station.) Call or write to confirm availability of data from
SUNSHINE AVERAGES 1. Comparative Climatic Data (updated annually) Contains average p cities. (Averaged from 1940s - 1990s) 94 pages:	percent of possible sunshine: monthly and annual tables for 275 large U.S. \$31.00
2. Selected Climatic Maps of the United States (1931-60) is a condense Mean daily Solar Radiation (January and July) Mean total hours of sunshine (Annual)	ed version of the <u>CLIMAT</u> ** and includes the following maps:
Mean percentage of possible sunshine (January, July, Annual) 8-1/2x11 in., 32 pages:	\$ 21.00
3. Mean percentage of possible Sunshine, monthly and annual maps ($\underline{CLIMAT}^{**}, 1931\text{-}60) \text{ 1-}16x22 \text{ in. sheet:} \\ \underline{Entire publication}$	p. 65 from \$ 5.00 \$12.00
$\underline{REFERENCE\ MANUALS}\ (Contain\ \underline{no}\ actual\ or\ average\ data)$	
1. "Solar Radiation Data", Environmental Information Summary (EIS) C-18 (1980) 14 pages	
2. Radiation Measurement IFYGL TM2 (1972)	
3. <u>History of Sunshine Data in the US, 1891-1980</u> Historical Climatology Series 2-2	
SUBTOTAL FROM PAGE ONE: TOTAL FROM THIS PAGE: SERVICE AND HANDLING CHARGE: \$5.00 OR \$11 IF ORDERED ITEMS TOTAL \$50 OR MORE RUSH PROCESSING: \$60.00 FEDERAL EXPRESS DELIVERY: (\$7.00 within contiguous U.S.) FOREIGN SURCHARGE: \$10 FOR ORDERS < \$100; \$20.00 FOR ALL ORDERS \$100 OR MORE ORIGINATING FROM OUTSIDE THE U.S. TOTAL COST OF THE ABOVE:	
PAYMENT made to "NNDC/NCDC" is enclosed for the selected items	s entered on this form.
SHIP TO:	FOR VISA/MASTERCARD/AMEX/DISCOVER ORDERS:
COMPANY/PERSON:	CARD NO:
ATTENTION:	VISA/AMEX/MC:EXP. DATE
ADDRESS:	CARDHOLDER NAME:
CITY: STATE:	CARDHOLDER SIGNATURE:

**CLIMAT = CLIMATIC ATLAS OF THE U.S. (1931-60)

ZIP: _____COUNTRY: _____ TELEPHONE: _____